Instructions for ATD-8615 Wheel Balancer

2
Pivot Pin
(Fulcrum)

3
Guide Rods
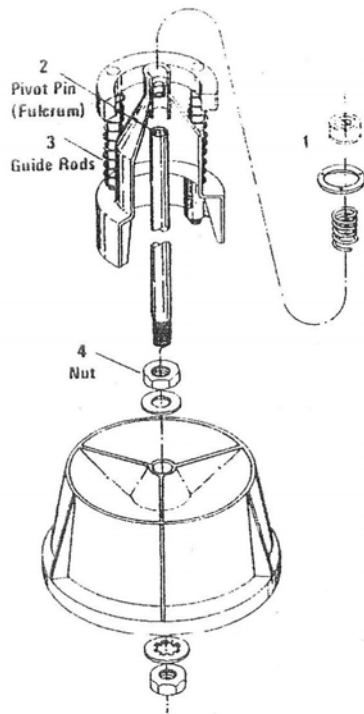
1

4
Nut

1. Make certain the bubble is in the middle of the black circle before using the balancer. This is necessary to guarantee accuracy of balance. See Arrow 1, Figure A.

   The bubble (circular level) in the ATD balancer is mounted into the top of the head assembly cone by three adjustable screws. If the bubble is not in the middle of the black circle when the head assembly is resting on the support shaft and not in use, adjustment can easily be made by screwing up or down on the screws which hold the bubble in the balancer. Turn one of the screws downward the bubble will move away from you, turn the screw upward the bubble will move toward you. Adjustment of the bubble must be made with the head assembly sitting on the support shaft.

2. Always keep No. 10 weight oil around the pivot pin located in the upper end of the balancer support shaft. This will guarantee a minimum of friction and allow your balancer to operate accurately. See Arrow 2, Figure A.

   Make sure that the FOUR steel guide rods located in the head assembly are free of dirt and well oiled to insure easy and accurate seating of the wheel on the balancer and to eliminate rust. See Arrow 3, Figure A.

   Be sure that the support shaft is firmly secured in the stand by tightening the nut as indicated in Arrow 4, Figure A. This is necessary for the proper function of the balancer.
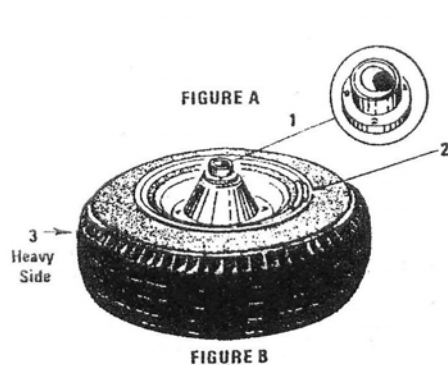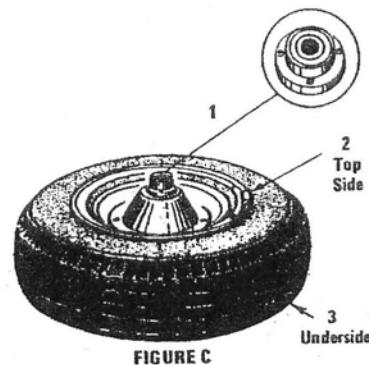
3. Remove the tire and wheel from car and scrape extra mud from the underside of the wheel. Check the hub hole in the wheel, it may need minor scraping to insure uniform seating on the balancer cone.

   Place the tire and wheel on the balancer using light downward pressure to guarantee accurate seating. Let balancer settle to a stop.

   If there is an out-of-balance condition the heavy side of the tire and wheel will cause the bubble to move outside the black circle in the opposite direction to the heavy side. See Arrow 1, Figure B.

   Lay a weight on the light side of the rim closest to the bubble. See Arrow 2, Figure B. If the first weight does not bring the bubble back to the middle of the black circle, then remove the weight and lay a larger or smaller weight in place to bring the bubble to the middle, as shown in Figure C, Arrow 1.

4. Remove the tire and wheel from the balancer and place the proper amount of weight needed equally on both sides of the wheel. For example, if it requires a total of 3 ounces to properly balance the wheel, attach a 1-1/2 ounce weight on the top of the wheel rim and a 1-1/2 ounce weight on the underside of the wheel rim. Divide the weights when 1 ounce or more is to be used.

   If you need to use weight which cannot be divided equally, attach the heaviest weight on the underside of the wheel rim and the lighter weight on the top of the wheel rim. For instance, if you need a total of 2-1/2 ounces, attach 1-1/2 ounces on the underside and 1 ounce on the top side, making a total of 2-1/2 ounces.

5. In case the pivot pin in the balancer support shaft becomes worn, remove it with long-nosed pliers and put in a new one. Use a small amount of Permatex No. 1 on the end of the pin which is to be inserted into the shaft. Permatex will harden and secure the pin firmly. If you need parts see your local ATD Jobber.

FIGURE A

1

2

3
Heavy
Side

FIGURE B

1

2
Top
Side

3
Underside

FIGURE C

See reverse side for using the 4 weight system or ABC system.

ATD
ADVANCED TOOL DESIGN

Instructions for ATD-8615 Wheel Balancer
when using the A.B.C. Weight System for Balancing

1

HEAVY SIDE

LIGHT SIDE

BUBBLE

2

L

3

L

4

CHALK MARK

5
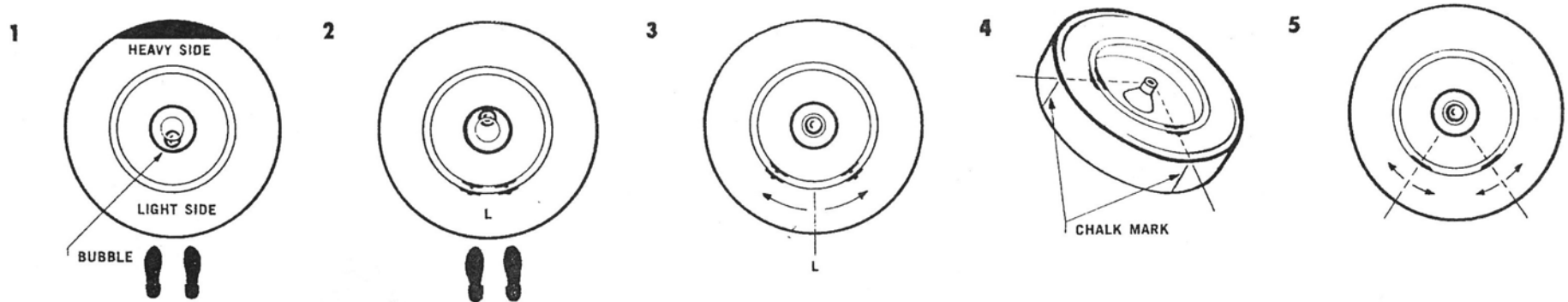
1. Illustration of wheel and tire assembly out of balance and your standing position during use of the balancer.

    Be sure that the support shaft is firmly secured in the stand by tightening the nut. This is necessary for the correct function of the balancer. Make sure the bubble is in the middle of the black circle before using the balancer. This is to guarantee accuracy of balance.

    The bubble (circular level) is mounted into the top of the head assembly cone by three adjustable screws. If the bubble is not exactly in the middle of the black circle when the head assembly is resting on the support shaft and not being used, adjustment can be made by turning up or down on the screws which hold the bubble in the balancer. If you turn one of the screws downward the bubble will move away from you, turn the screw upward the bubble will move toward you. Adjustment of the bubble must be made with the head assembly sitting on the support shaft.

2. Lay 4 "A" weights in position at "L", as shown in the diagram. The weights are used in pairs with one of the weights of each pair located on the rim flange and the other weight directly behind it. If the bubble does not float to the middle or beyond, replace the 4 "A" weights with 4 "B" weights and likewise if the bubble does not center or go beyond, replace the 4 "B" weights with 4 "C". It is possible that 4 "C" weights will not balance the wheel. This may occur when the heavy spot of both wheel and tire are located on the same side. If this condition exists, deflate the tire and rotate it approximately half way around the rim and then re-inflate the tire.

3. After you have determined which four weights to use and have them placed in pairs, as shown in Fig. 3, move the pairs in opposite directions from each other around the rim equal distance from the starting point until the bubble is centered in the black circle.

4. Draw a vertical chalk line on the tread directly in the middle of each pair of weights. To accurately locate lines, sight through the middle of the weights to the middle of the balancer. Remove the two pairs of weights and lift the wheel from the balancer. Attach one weight on the inside of rim directly in line with each chalk mark on the tire.

5. Replace wheel on balancer "Outside Face" up and lay one of each of the remaining weights on the rim approximately in line with each chalk mark. To check for balance move weights slightly apart or together until the bubble is exactly in the middle of the black circle. Attach the two remaining weights to the outside rim flange.

ATD
ADVANCED TOOL DESIGN